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ABSTRACT

This series of five short papers describes an interdisciplinary, community action research project in Newfoundland that sought to enhance and extend the traditional and technological literacy of adults. The papers were part of an action research project conducted by the directors and tutors which made computers available in community resource centers, with flexible scheduling, using texts and projects chosen by the participant learners. The participants included socioeconomically disadvantaged parents, women who had been out of the workforce for a considerable time, English-as-a-second-language learners, and learners who were self-declared illiterate or disabled. The authors of the papers describe the project from the perspectives of tutors, participants, and co-directors. They found the project to be amazingly successful in helping the participants to learn both computer and traditional literacy and to raise their self-esteem and connection to the community. (Contains 25 references.) (Author/KC)

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Friendly Neighbourhood Computers: Action Research in Adult Literacy

A Presentation to Conference on College Composition and Communication, Denver, Colorado, March 14-17, 2001

By

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2

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Keywords:
literacy, community project, technological literacy, computers, Internet, adult literacy, action research, family literacy, participatory democracy

Abstract:

This series of papers will describe an interdisciplinary, community action research project that seeks to enhance and extend the traditional and technological literacies of adults. Computers and instruction (mostly one-on-one tutoring by graduate students) are made available in community resource centres, with flexible scheduling, using texts and projects chosen by the participant learners. The participants include parents experiencing socio-economic disadvantage, women who have been out of the workforce for considerable time, English second language learners, and learners who are self-declared illiterate or disabled. This project contrasts sharply with most institutional adult literacy programs, which often use textbooks and methods designed for teenagers, are marketed primarily as ways to earn diplomas, are increasingly offered by private rather than public institutions, and are inaccessible to those in most need of them.

The authors of this series of inter-related papers describe this "project of possibilities" from a variety of perspectives: tutors, participants, and co-directors. Questions addressed include:

What kinds of projects do adults choose when offered free access to computers and instruction in IT and literacy?

What kinds of communications, networks, community development, and political action do participants engage in before, during, and after participating in this personal, professional, and public action as they proceed through this project?

What changes do the participants themselves identify in self-esteem, relationships with others, and opportunities for mutually beneficial links with neighbourhood communities in which they are located?

Friendly Neighbourhood Computers: Action Research in Adult Literacy

Phyllis Artiss, Laura Fitzpatrick, Roberta F. Hammett, Xiaoqian Kong, and Elizabeth A. Noftle

Friendly Neighbourhood Computers: Literacy Intersections (by Roberta F. Hammett)

A number of different paradigms underpin various adult literacy programs (Shannon, 1998). In Newfoundland and Labrador, there is a great deal of talk about high illiteracy rates, and several literacy programs, past and present, have been funded to address what is considered an important problem (Fagan, 1998). In conceptualizing a research project that explores the intersections between computer and literacy learning, we sought to enact our beliefs in social justice, feminist action research, and Freirean critical literacy. Within a critical literacy framework, as Giroux (in Freire and Macedo, 1987) suggests, "men and women assert their right and responsibility not only to read, understand, and then transform their own experiences, but also to reconstitute their relationship within a wider society" (p. 7). Within this concept, as well, is the possibility of empowerment not only of participant learners but tutor-researchers as well. Such empowerment means "acting both individually and collectively to change the conditions of our lives" (Lather, 1991, p. 4).

Our research proposal, which was funded by Social Sciences and Humanities Research Council of Canada and The National Literacy Secretariat,[1] suggested that there are intersections between computer and literacy learning that are important for adult education. Our stated goals for the research initiative are:

[1] The Strengthening Families and Communities through Computer and Literacy Learning Opprotunities for Adults research project was funded by the Social Sciences and Humanities Research Council of Canada and the National Literacy Secretariat (Strategic Programs and Joint Initiatives, Valuing Literacy in Canada, Grant 831-1999-0011), whose vital support we gratefully acknowledge. It was also generously supported by our community partners, the Brighter Futures Coalition, particularly Rod O'Driscoll, Karen Nolan, Deborah Capps, and John Flood. We also acknowledge with deep gratitude and admiration the participant learners, whose enthusiasm and hard work made it all worthwhile, and thank all the tutors in the project for their conscientious work, sharing attitude, and commitment.

1. To document the literacy learning of participating adults and their subsequent uses of Internet and other computer technologies;
2. To investigate the intersections of literacies, specifically traditional literacy and technological literacy and their uses in the everyday lives of the participants;
3. To assist the participants in the support and development of their children's learning;
4. To assist the participants in the development of their own life chances.

In setting up the research and teaching project, we considered that "Working in an empowerment framework requires a research design that will draw attention to differences in power and help both to uncover dominant constructions and omissions and to articulate the experiences and perspectives of marginalized people; that will promote reflexivity and encourage action (Burman, 1992); that will encourage accountability and reciprocity, yet allow for various levels of collaboration for participants" (Ristock & Pennell, p. 49). Our project is set up so that members can learn together, identifying and addressing relevant issues in the neighbourhood, rather than attempting to improve literacy scores and job competencies of individuals, although these also are potential outcomes.

We chose to set up our sites in areas in which our community partners, Brighter Futures Coalition, had established Family Resource Centres. Generally, these are central urban areas where many residents face socio-economic challenges. Catering to parents and their children aged 0 to 12, these centres offer a variety of programs: Healthy Baby Club, Play Group, Parenting courses, PRINTS and other early literacy and book programs. As our contribution to the partnership, we offer tutors, computers, and all the necessary supplies, including some office furniture; our partner provides the space, electricity, and so on, and introductions to the parents already attending Brighter Futures programs. This partnership has worked very well; children

can play in the Family Resource Centre's playroom under the supervision of one parent or a childcare worker while others learn in the computer room. One of the centres is located in an elementary school, which has set aside three rooms for Brighter Futures Coalition and our project; the other site is a duplex in a rent-controlled neighbourhood.

In deciding on a definition of literacy that would serve our project, we agreed with expanding models of literacy that include affective and ICT definitions of literacy (Cope & Kalantzis, 2000). Although we have since reconsidered our initial decision not to collect information about functional literacy when participants join the project, we did ask about technological experience and literacy through a brief questionnaire. We offer a variety of learning possibilities and individualized instruction. We invite participants to set their own goals and to decide in what kinds of activities they, as individuals, want to engage. We arrange workshops to bring learners together to discuss and practice special needs, such as learning and critiquing computer games. When we started the project, we did not have Internet access at either site, so of necessity the activities and products were print-based. Since then, we have added Internet access and subsequently critical Internet activities to our program.

In both sites limited space means learners sit closely together, and often share knowledge and ideas for projects. We encourage teaching and learning from one another, hoping the project will be self-sustaining.

The concepts associated with Freirean literacy approaches—liberatory, emancipatory, conscientization, empowerment, naming oppression – are sometimes difficult to enact in North American settings. Thus tensions may arise, as has been the case in our project, as an idea becomes flesh, so to speak. By tensions, we mean dilemmas, compromises, questions, and occasionally even arguments. A continuous negotiation occurs in relation to "maverick

individualism when collective action is needed" (Shannon, 1998). In the sections that follow, such tensions, along with the accomplishments and successes, will be presented in the voices of the various project participants. These sections will demonstrate how computers can be the magnet that draws learners together and the tool that allows each of them to achieve personal and political literacy goals in ways probably not possible (and its converse, possibly not probable) in any other way.

A Participant's Perspective (by Elizabeth A. Noftle)

Through the Brighter Futures Coalition of St. John's and District, the Strengthening Families and Communities computer program became available. The Brighter Futures Coalition is designed to bring parents, children and communities together to foster, develop and sustain programs and services that enhance the healthy birth and development of children (ages 0 - 12) and their families.

When I started my family, I left the workforce to become a full-time homemaker. I have three children: Lauren, 9; Emily, 7; and Harry, 5. When Lauren and Emily were in Grades 2 and Kindergarten I became aware of the Brighter Futures Program at their school. Harry was about three at the time and I felt that this program would greatly benefit both of us. The Brighter Futures offered a place for parents to bring their children for play, interaction with other children, as well as interaction with other parents. There is a great support system through Brighter Futures. The children as well as the parents go through Personal Development Programs, Parent Training Programs and Healthy Living Programs.

When a partnership was formed between Memorial University and the Brighter Futures Coalition to bring adult literacy and computer training to our group, I was out of the workforce for seven years and had no experience with computers. What an opportunity! Not only were

they offering me the opportunity to learn, but also it was cost free and my pre-school son would receive childcare at the same location. There was no hesitation in participating; I was eager to start, but at the same time I lacked confidence in my abilities to succeed. Seven years out of the work force is a long time, but as the old saying goes, "Once you learn to ride a bicycle you never forget". A person's confidence level rises very quickly once involved in a program like this one.

Twice a week, while Lauren and Emily were in class and Harry was in the Brighter Futures play group, I would also be in class. Very conveniently the play group and the computer group were held in my children's school. The location was very important – especially for a mother who had left the workforce to be at home with her children. With everybody under the same roof, I felt at home knowing that my children's needs were being taken care of and I was close by if needed.

Through the in-class instruction I learned Microsoft Word, Internet, setting up E-mail account and addresses, creating Web Pages, Microsoft Excel, scanning and various other programs. These classes offer much more than computer skills training; there is a phenomenal relationship and mutual support system among the tutors and participants, which builds confidence and self-esteem. It provides an ease-back transition for those who are interested in getting back into the workforce. It also provides a network of people from various backgrounds.

A few of the comments from other participants follow:

"Thank you for giving me this opportunity. I would like to learn more" (Rita)[2].
Rita could not read or write in the English Language when she started this program. She is a homemaker and mother of three. The computer skills she acquired enable her to communicate through the Internet with her Family in another country. She speaks English well but has a

desire to learn to read and write the language. One of the other participants in the program is involved in the Immigration Advisory Council. Through the networking of people possible in this project, Rita now has the opportunity to attend English classes.

> "This is the first thing I have done for myself in eight years. My self-esteem has sky rocketed and I'm very confident about helping other computer students in the future" (Coleen).

Coleen is a homemaker and a mother of two. She had little confidence in her individual success in learning the computer and she feared, at first, she would break it! Just a year later she acknowledges that this program has given her great success. She has acquired computer skills, and has the confidence to teach others; she volunteers at the school to help students during their computer classes. Coleen recently became a Resource Mother, which is a volunteer position through Brighter Futures. In accepting this position, she has the confidence to work with Social Workers, Public Health Nurses and Nutritionists and has the confidence to provide the necessary support for Pregnant Women. She stated that her self-esteem has soared.

Through my own participation in this program I have become more at ease with computers, and I have also become aware that I have a responsibility to other parents to assist and encourage where I can, and to promote participation to those presently unfamiliar with the program. My friends and I created and distributed pamphlets about the project in the neighbourhood. I have personal one-on-one discussions with parents I meet at various activities. On a regular basis I volunteer at my children's school during computer classes assisting elementary students, an experience that the students and I greatly benefit from.

Since starting the computer training I have become a board member with the Brighter Futures Coalition. I have been invited to the Grand Opening of the newest site of the Brighter

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[2] Pseudonyms are used to refer to project participants throughout this document.

Futures and will be attending a Provincial Workshop in Central Newfoundland next week. Continuing education and forming a network with other people can provide endless opportunities. Look at me, I'm in Colorado meeting new people and gaining new experiences and promoting the importance of the Strengthening Families and Communities computer program.

I have a strong belief in this program. It has helped people with language and literacy barriers. It has helped people with confidence building. It provides ease back for those wishing to re-enter the workforce. It is necessary to continue building on the growth of the Brighter Futures Coalition and The Friendly Neighbourhood Computers Program within the schools and the community. This will be my personal challenge in the coming future.

Cross-Cultural Perspective (by Xiaoqian Kong)

"Is it correct? What should I do then?" The participants always asked.

"Click on the third icon on the top and…." I would have told them what to do for each step when I was in China.

"Think about it. Which icon could you use for it?" I finally learned to speak this way to the learners.

Having been a learner and then a teacher in Chinese educational system for more than twenty years, I became a student teacher again for the computer and literacy learning project Strengthening Families and Communities through Literacy Learning Opportunities for Adults. This cross-cultural experience is great for me, for I learned how to do action research and it led me to keep reflecting on my former schooling and teaching. Moreover, I got the chance to meet and understand local people.

Although I was totally in dark about the term action research, I learned what it is from what I experienced in this computer project. On the one hand, I was not aware that this project is an exploration of the theory that computer literacy will benefit our participants' lives in various aspects. Who are these people from those communities? Why do they want to learn computers? Why not others? These questions had never come to my mind before I got to know the participants and started to see real changes in their lives. It was like a mystery that was uncovered to me little by little by being an active part of the project. Through action research, we have been trying out ideas in practice as a means of increasing knowledge of teaching and learning (Kemmis & McTaggart, as cited in Johnson, 1993).

On the other hand, I did not really understand what reflection means until we got feedback from the directors. Above all, my understanding of field notes was narrow: just recording whatever was happening there while I was present. I thought the data were only for the co-directors to analyze so no subjective opinions should be involved. Although I had some thoughts, I did not get their point that all the tutors are students from various disciplines and our knowledge would be valued and could contribute to the whole project. Moreover, our team meeting every week provides us a chance of exchanging ideas and learning from each other. What is learned at one site warns the other site and successful trying of one group also brings benefits to another; interesting points are raised by individuals and these usually trigger a big discussion; important decisions and changes are made based upon everybody's agreement; and I am kept informed by up-to-date information about computer and literacy learning through various media. I did not expect that I would gain so much valuable information from these meetings. Action research enables us to look at what we are or should be doing, to reflect on what we are thinking and feeling, and to seek creative ways to improve how we are behaving

(Schmuck, 1997, p. 20). Consistently, we have been altering between action and critical reflection (Dick, 1993). Even though reflection is one kind of spirit of Chinese culture, I got a deeper understanding of it from doing our project.

Despite the fact that at the beginning of the project I did not realize I was expected to include my reflections, the recalling of each session in order to keep the field notes enabled me see myself in teaching. I thought that I was working hard to teach participants to learn, but I was actually not; and I thought that I gave them chances to try out their ideas, but I was still in control. I would not have been aware of that if I did not go over it again in my mind. First of all, when participants did not generate their own project ideas, I always gave suggestions for trying things that I knew quite. Since most were starting from zero, they did not know what they could do with the word processor. I would usually give them examples like shopping lists and letters. For the other functions that I was not very familiar with myself, I would try them first before I would recommend them to the participants. When they surfed the web, I always asked them to try the search engines that I like to use, although I knew that each engine has its different good and bad aspects. It was hard for me to deal with the uneasiness caused by unfamiliar things. My schooling and teaching in China taught me that, as the authority, the teacher is supposed to know everything that is going to be taught. I felt the discomfort when I lost this authority. This way, I lost the chance of discovering new things with the students.

Moreover, instead of facilitating learning, I was trying to instruct them and implement my own curriculum. I did not leave the space for them to inquire from the beginning. Before they thought about how they should run the machine, I had told them what to do first. When they asked for help, I would tell them exactly what to do step by step rather than raise questions to get them to think first. This did not help them learn independence. Its consequence was that they

relied on the tutors instead of making bold trying. For example, Sally once told me that she was still afraid to even turn on her computer at home. I wondered why since she seemed so competent with me. Later on in my notes, I saw a similar thing happened to Rita, an ESL learner. She would not type her email if I were not there with her. I concluded that I had given too much help to them and they would not work on their own; I was not patient in waiting for their discovery of ways to solve their own problems and learning new things. This limited their creativity and nurtured their dependence on tutors. I was used to the traditional way of teaching. The openness of the project made it hard for me to teach in that way.

Another thing I learned from this project was that I had assumptions about Newfoundlanders even before I knew any of them. On hearing that I was applying for MUN, a Canadian ESL teacher in China joked with me about Newfoundlanders, implying that they are lazy and stupid. However, this impression has been changed totally by the intelligent, diligent and kind-hearted Newfoundlanders I tutored in Bright Futures. Generally, everybody achieved a great deal within a limited amount of time. Most started from having no computer skills and ended up using them to the benefit their lives. When Sally joined us, she impressed me with her reason for learning computers – gaining respect from her oldest daughter, a teenager who loves computers. They have their own computer which was totally in charge of her husband and the daughter and which she dared not to touch for fear of breaking anything and being shouted at. It was exciting for me to see her changing little by little. I remember the day she came in with a big smile, telling me how she had surprised her daughter by restarting her computer when her husband was not at home; another day after she successfully downloaded a cat screenmate at her computer, she commented that it was so easy and wondered why she had not dared to try before. She surprised me most by creating a checklist for customers' satisfaction with her work. That

was her fight for fair treatment by her supervisor and she generated that idea and made it come true all on her own. Having been a housewife for years and almost having no chance to utilize her knowledge in high school, she recognized her wisdom and regained her self-esteem and confidence by participating in our project. Technological literacy served as a tool in her improving of family relationships and job situation.

"One is never too old to learn " is a famous quotation from a Chinese leader, Mao Ze Dong, and I see this spirit in our project. We had several senior participants and each of them encouraged me with their determination to learn and open-mindedness. Among them, Evelyn, a Catholic Sister who is around age seventy-five, impressed me by her quick learning although I did not help her many times. She clarified for me at first that she joined us as a companion to her students who had some disabilities and her only interest was to know what she could do with a computer. It sounded to me that she did not really want to learn at all. However, once she started to try creating a file, she began to enjoy clicking on icons and finding out their functions. Her good memory and alertness aroused my curiosity and she explained to me that was because she enjoys learning new stuff all the time. Another older woman who amazed me was actually not in Canada but she has great positive impact on the computer literacy of her daughter, Carolyn, one of our project participants. Carolyn was mainly interested in using the computer as a connection to her friends and family and she tried to master communication software such as Yahoo Messenger, Hotmail Messenger, and Internet phones. However, it was her mother rather than any of us tutors who was guiding and instructing her using these. By email, they would arrange a time to meet online, and by microphone, her mother would tell Carolyn what to do and where to go. Furthermore, she never stopped learning new things. Carolyn enjoyed talking with her mom through voice mail, PC-PC calls, and eventually PC-Phone calls. Carolyn

advanced with her mom's help from accepting whatever software was defaulted by the browser to making a choice of preferred software. Carolyn was also excited about trying the digital video camera with her mom. While sitting behind Carolyn and helping her, I was actually learning, too. I could not believe it when Carolyn proudly told us that her mom, around age 60, had taught herself computer literacy just two years before.

As for Newfoundlanders' kindness, I had had some sense before I worked for the project. However, I do not think I would have had any deep feelings for them if I had not met those participants. I left my new-wedded husband back at home in order to pursue my degree and when he had difficulty coming and visiting me, I was near a breakdown. Carolyn and others sensed that. They expressed their great caring and understanding to me; they gave me a lot of suggestions to go through that difficult stage; and Sandra invited me to go over her place to get rid of my loneliness. That is what I would never expect to get from my work. Besides, another Chinese tutor got pregnant. She managed her anxiety about her pregnancy with the support and advice from almost all our participants.

This work not only helped me get a new point of view of Newfoundlanders, but also benefited my own life. Sally's struggle for what she deserves at both home and work made me think about myself. For example, when I suffered unfair treatment, I used to either keep silent or complain only to my friends or family. This typical Chinese way did not help me as Sally's action of learning computers and using a satisfaction checklist at work helped her. Sister Evelyn and carolyn's mother's learning experience challenged my assumption that computers were just for the young. I used them as examples for my parents who started to learn computers since I left home in China. This was so encouraging that since then they were more patient in trying to solve problems by themselves. Moreover, my interest on Internet phone calls was aroused by

Carolyn, and my family in China also learned how to use them. By this means, I enjoyed talking with my family online without worrying about expensive international phone bills. When I was depressed by my personal problems, Sister D and other people's optimism opened my mind. They let me see the good aspect of bad news. I really enjoyed working with and learning from those people.

However, the openness of our project brought frustrations to me as well in terms of time, money, and interactions between people. First, tremendous amounts of time by the directors and the student researchers have been spent on it. I am a little bit scared by what they have to sacrifice to it and wonder whether I will be able to try out my own research ideas like this. I wonder if there is a way to improve our efficiency by better organization and thus save the time spent rescheduling and expecting participants who would not show up. Second, this meaningful research almost died for lack of funding. At the end of the first stage, everybody worried about printing and paper. However, a government-supported project in China is unlikely to suffer from this problem. I also wonder if a better budget and advanced plan for spending money at the beginning would help. Third, the space of our sites is so limited that some interactions between people were not only undesirable but also interrupting to instruction. While I was searching words in my head for a better way to answer participants' questions, the other tutors were faster to answer without questioning whether I needed their help or not. Their interference was caused by the fact that English is not my mother tongue; this would not likely happen among researchers of the same language. Furthermore, people were easily distracted by what others were doing. One person left since she could not concentrate while Carolyn was chatting through microphone and the audio speakers were loud. These problems could be avoided if we had more space. Anyway, I learned from these that I should never overlook the difficulties in research. As

Schmuck (1997) pointed out, reflection is not only about the past, but also the present and the future.

About research, my colleagues in China used to remind me to keep records of what struck me during reading and teaching. And that was what their research about. Some listed ways to translate a certain English word into Chinese, and some suggested ways to teach grammatical rules without questioning their effectiveness in class. But now for me research is no longer something technical like that. Instead, it has meaning because our quick reaction to new situations and constant meaningful changes are involved in the process of improvement.

Links between Computer Literacy and Traditional Literacy: The Case of Bob (by Laura Fitzpatrick)

I am a Master's student in Women`s Studies. I worked as a tutor in the program. My background as a feminist critical literacy tutor led to my interest in this project. In this paper, I focus on the experiences of Bob, a learner that I worked with. Bob is an alias and the quotes I use in this paper are from my field notes.

As Betty mentions in her paper (above), participants used the program in different ways, depending on their needs. Attaining computer skills was a primary focus for Betty. Other learners used the program to work on English as a second language, and Qian (above) elaborates on this in her paper. Bob, the learner that I will discuss, used the program to improve his traditional literacy skills.

Bob is 48 years old and entered the program self-identifying as illiterate. Bob did not complete elementary school, which he feels was a result of learning problems, compounded by unsympathetic school teachers and principals, and bullying by other students who would call him stupid. Over the course of his life, Bob has worked various kinds of labour and, as Bob

said, "I have traveled all around the world while I was working on the boats, but I can't read and write" (Fitzpatrick, November 19, 1999).

Bob tried a number of literacy programs in the past, but found these experiences frustrating. He confided in me that he felt self conscious about what his handwriting looked like, and was therefore resistant to written exercises, and had primarily relied on audio-taped literacy materials to help him read. Bob expressed that past programs had improved his literacy skills very little. He joined our program with early grade-school literacy. Bob's skills rapidly and consistently increased while working with the program, and he attributed this positive change to computers. I will discuss some of the ways in which computers seemed to make a positive difference to Bob's learning.

Computers allowed Bob to overcome his self-conscious feelings about writing, since the letters and words he wrote were typed as opposed to hand written, and in Bob's eyes, therefore, looked correct. This seemed to encourage Bob emotionally and to help him learn spelling and grammar, because after he printed his text, he could read his type more easily than his handwriting. Because he felt good about what his writing looked like, and in control of his interactions with his writing, he felt comfortable sharing it with others. He shared his work with other learners, and printed copies of his work to bring home, to read to himself and to his loved ones. This encouraged practical learning and positive connection to his own identity and to those around him.

The importance of interaction in learning cannot be underestimated. Bob said, "if I was on my own, I wouldn't do the work" (Fitzpatrick, January 21, 2000). He was not only referring to having a tutor by his side, but to the support he received from others. As I have just mentioned, he received this support because word processing made him feel so good about his work that he

felt comfortable sharing it with others. But this is not the only way computers facilitated a sense of community in Bob's learning. Although a traditional literacy program designed from a critical pedagogical standpoint can achieve an atmosphere of collaborative learning, I found that computers, as mediums, readily facilitate a shared and social learning experience. This is partly because applications such as e-mail and Internet allow real, fluid interactions created by learners. This is in contrast to traditional literacy exercises that are often created for learners, and can feel staged and isolating. Participants readily talked with each other about news, e-cards, and pictures they received from family and friends through e-mail, and shared information of personal interest that they found on the Internet. Through these experiences, Bob got to know other participants, and shared in their learning. It was from other participants that Bob first learned about e-mail, and this motivated him to think about how he could use email to send his brother copies of his writing. In these ways, Internet applications facilitated a sense of community in Bob's life, and nurtured connections he had with other learners and with loved ones, including those living elsewhere.

Computers also facilitate another, broader sense of community, one of global connection and communication. Most participants joined the program because they were aware of the growing importance society is placing on computers, and felt the need for computer literacy in their daily lives. Participants wanted to be part of this new global community, but at the same time, felt some anxiety about learning computers. This common fear of technology was complicated by, among other things, class and accessibility issues. The "othering" message that "computers are for somebodies or somebody else" was internalized by many participants. However, society seems to be quicker to forgive adults who lack computer literacy, than those who lack traditional literacy. Most participants did not seem to feel the same level of

embarrassment, as they may have felt, if they were attending a reading and writing class. Although from the first day of class Bob openly discussed his lack of literacy skills, it seems the benefits of learning computer literacy, and feeling connected to a global technological community, provided an incentive for Bob, that traditional literacy classes did not provide him in the past.

Bob's motivation to learn was sustained as he discovered more in-depth ways that word processing could help him. He learned that word processing could help him, not only with what his writing looked like, but with developing the content and expression of what he wrote. A key example is that Bob found editing text from the computer screen tremendously less cumbersome than from handwritten pages. Ease of editing, made possible with features such as copy and paste, meant that organizing his thoughts to make them appear as he would like them to be conveyed to himself and to readers became a possibility that he always had struggled to achieve with his handwriting. Bob expressed that computers made him feel like he was *"doing"* or *"working"* with words and sentences (Fitzpatrick, January 21, 2000).

This sense of "doing" or "working" is connected to Bob's learning style. Bob's command of manoeuvring himself on the screen surpassed the abilities of many other participants, yet his traditional literacy level was much lower than theirs. He seemed to learn through the intersections of touch, visual stimuli, and quick and multiple movements or applications, which are provided more intensely by computer usage than by other traditional literacy exercises, such as audio tapes.

I believe Bob's ability to "do" or "work" with computers is also connected to class and gendered experiences of working with his hands. Bob approached a computer the same way he would a machine or a tool. A computer was something mechanical, that he used his hands to

work with. This standpoint provided a familiar association of control that Bob felt from a lifetime of hands-on labour.

A major challenge I faced in facilitating the integration of computers into Bob's literacy learning was encouraging him to develop his handwriting and to read texts other than those appearing on the computer screen. A back and forth movement between computer literacy and traditional literacy was encouraged. Bob sometimes hand wrote notes for his diary entry before he typed them onto the computer screen, and sometimes printed his diary pages and edited his work with a pencil. Dictionaries and English handbooks were used in conjunction with spell and grammar check.

The links between computer literacy and traditional literacy became more apparent as Bob became increasingly confident to apply traditional literacy skills to contexts outside of his computer-related projects. Bob tried to read whatever came into the community-learning circle on any given day. One day a greeting card was circulating for everyone to sign and Bob took his time reading it and before he signed his name. Another day we were scheduling activities and we needed to contact participants. Bob used the telephone book and, with pen and paper, wrote participants' names and telephone numbers. On other days, Bob brought to class newspaper articles that he would like to read.

Bob is now attending a job readiness course, offered by another community group. Before he finished with us, Bob shared his experiences in the computer literacy program with others. He used a combination of computer and traditional literacy skills to do so. He was interviewed by a provincial radio station, wrote an article for a community newsletter, and wrote and delivered a speech, during a party the program had hosted, for celebrating the achievements of participants. Bob also began to use his literacy skills in community contexts beyond the

computer program. For instance, Bob worked with his provincial government representative to write a letter lobbying for school bus service in his neighborhood. These are examples where Bob transformed his own experiences and reconstituted his relationship within a wider society (Freire and Macedo, 1987, p.7). Bob expressed that learning to read and write, "opens my mind", and for me, as a feminist literacy tutor, this is what critical pedagogical approaches to learning is all about (Fitzpatrick, January 21, 2000).

In this paper, I have explored ways in which linking computer literacy and traditional literacy creates a rich and radical learning context. An important demand I faced as a tutor in this learning context was to maintain an awareness of what kinds of messages are taught about the power of computers themselves. Computer literacy classes can be viewed, by teacher and learner alike, in the same "savior vein" as traditional literacy programs. I have learned therefore that the teaching of computer literacy must incorporate a critical thinking about computers and their applications.

Examination of Some Assumptions Underlying Provincial Literacy Policy (by Phyllis Artiss)

The province of Newfoundland and Labrador is generally referred to as Canada's "have-not" province, with the lowest literacy rates, lowest incomes, and highest unemployment rates in Canada. Its already shaky economy was devastated in the last decade with the collapse of its cod fishery, and the subsequent out migration, often of entire families and communities, looking for work.

The provincial government responded to the crisis with a number of strategies, including the launch of a strategic social plan set forth in the publication People, Partners and Prosperity (1998), a relatively enlightened document, as government documents go. In 2000 this broad

policy statement was followed by one specifically addressing the province's perceived low literacy levels: Words To Live By: A Strategic Literacy Plan for Newfoundland and Labrador, a well intentioned but not particularly enlightened policy statement.

We in our project share some views set forth in its document Words To Live By. Like the authors of this report, we are committed to developing a more integrated approach to literacy in the province than now exists. We agree that there is a need to develop active partnerships involving families, communities, governments and educational institutions. We share with the authors an optimism about the potential for adults, as well as children, to develop their literacy and computer skills, and we also value (and promote) a culture of literacy.

We have a number of reservations, however, about the province's Strategic Literacy Plan as set forth in Words To Live By. Here we examine some passages from the document, and analyze assumptions that seem to be embedded in its discourse, in the omissions as well as the actual words. In particular, we show how insights gained from current scholarship in literacy and from our project challenge basic tenets of the Strategic Literacy Plan, and we point to some implications for pedagogy, research and policy in adult literacy.

1. *Assumptions about what literacy is*

> "For the purpose of this plan, literacy is defined as the ability to understand and use the printed word in daily activities at home, at work and in the community." (Words To Live By, p. 4)

As pointed out above (in Hammett's section) in our project we work from a much broader version of literacy, which includes but is not limited to understanding and using the printed word. We prefer expanding models of literacy, including affective and IT literacy.

2. Assumptions about how literacy is acquired:

> "[T]o ensure Newfoundlanders and Labradorians are able to take advantage of the opportunities in the new economy, possession of sound literacy skills is a critical starting point."(Words To Live By, p. 5)

Here and throughout Words To Live By, the implicit assumption is that one must first learn to read and write before being trained for jobs and be unemployed in the "new economy." Literacy, in other words, is seen as part of a fixed linear sequence.

The case studies presented by Laura and Qian, autobiographical accounts by Betty, and other data in our study suggest that basic and advanced literacy skills can be enhanced and expanded while participants are learning to use computers. The sequence varies according to the background, self-images and perceived needs of individual participants, availability of computers and assistance in their use, cultural context, social situation, tasks at hand, and many other factors. Our findings are supported by much current research in literacies (Dias, Freedman, Medway and Pare, 1999; Faigley, 1992; Hull; Selfe, 1999; Selfe and Wahlstrom, 1985).

Closely related to this assumption about literacy being acquired at the beginning of a linear sequence of other skills related to participation in the new economy is the idea, also embedded in Words To Live By, that literacy is best acquired by providing traditional instruction in basic reading and writing skills, using traditional materials. The report makes few references to acquiring literacy by using recent technologies, and once again, only as part of a linear sequence similar to that mentioned above:

> "Today's society, with its emphasis on information technology and communication skills, requires an even more sophisticated level of literacy than was sufficient to function a decade or two ago." (Words To Live By, p. 4)

The obvious implication would seem to be that the literacy skills taught (best? mainly? or even exclusively?) by the use of pens and paper, books and other hard copies of texts. As in traditional schooling, the assumption seems to be that the *writing* of texts by literacy learners is to take place, using pens, pencils and paper, but that they will *read* printed texts. (So literacy learners will be the consumers of goods produced by technological means, but the producers of low-tech goods). Again, the evidence we gathered in our study does not support such a view.

3. *Assumptions about clients*

a. Adults who are not fully literate are deficient, a drain on society. The document Words To Live By tells us that poor literacy skills cost over $4 billion to business each year, and further, "the actual costs of poor literacy skills are beyond estimate, as are the human costs paid by people with limited literary skills: stress and low self-esteem, poorer health, lower income or poverty, increased criminal activity, and an inability to participate fully in social and community life." (Words To Live By, p. 35)

Our study is wary of such attitudes, and finds support in our work for the theories of Freire (1985), Graff (1979), Stuckey(1991), Hull(2001), Horsman (1990) and others who provide powerful evidence of the productivity and richness, in human as well as economic terms, of those who have lived their lives without meeting the standards of text literacy as they are presented in this report.

b. Another assumption Words To Live By seems to make about clients (and others in Newfoundland and Labrador) is that people do not recognize the value of literacy skills. So this document set out on its first page, as one of its three overall goals, to develop "a culture that values literacy as a desirable goal for all people" (p. ii). The research on this project suggests that such attitude is not a problem, that without exception parents and other adults who the

program place a high value on literacy for themselves, their children and others in their communities.

4. *Assumptions about responsibilities to clients (on part of government/society)*

Society has a responsibility to help those who are illiterate become literate. This is the flip side of assumption 3, and is also based on the deficit model. Embedded in this assumption is the belief that we who are literate have what the illiterate need in order to be fulfilled, productive, complete adults, able "to participate fully in social and community life" (Words To Live By, p. 35). This attitude may seem harmless enough, perhaps even incontrovertible. But Shaughnessy (1977), Sledd (1983), Daniell (1986) – to mention only three of the host of CCCC members who have greatly influenced my own thinking on literacy – point out the ethnocentric, patronizing, self-congratulatory element in pedagogy based on such assumptions. Like Freire (1970), these educators stress that we who teach must also learn. We need to understand not only the language of those we work with, but also how the structures of their discourse (and ours) interact with culture, politics, people's lives and values. If we are to transform the society in which we live, we need to work collaboratively, and this involves our learning as much from them as they are expected to learn from us.

5. *Assumptions about research in adult literacy*

I couldn't find the word "research" anywhere in the report Words To Live By, but there are numerous references about developing assessment measures (pp. 24-25, pp. 31-32). I am left to conclude that the only kinds of research recognized here is research intended to measure the effectiveness of literacy programs, and that the effectiveness of literacy programs is to be measured solely on assessment of individual performance of literacy learners. Once again, I arrive at this conclusion on the basis of what is not in the report, rather than what is in it. But no

matter how much we value the progress of individuals in our programs, those of us who follow Freirian traditions aspire to more, and, to demonstrate that, we do more. For example, we'd like to measure and document the kinds of progress made in community dynamics.

Perhaps the Strategic Literacy Plan's most innovative undertaking is its initiative to measure progress through a social audit. Instead of measuring the success of a program mainly (or exclusively) according to economic gains (jobs, profits, GNP, etc) or adding up the progress made by individuals (in health, education, employment record, for example), the Strategic Literacy Plan aims to take a "picture of the social health of the province and its communities" (Words to Live By, p. 31, p. 31). Progress is measured against the community's own goals, articulated through a series of community consultations, with active participation of community members. This is an extremely ambitious, complex process, with implications for research and policy in literacy and community development that reach well beyond our province.

6. *Assumption that no real expertise is needed to develop literacy policy*

Again we arrive at this conclusion on the basis of omissions. One need only look at and compare this report to those on health policy. Literacy is not in the same league. There's no need to consider high-tech facilities, highly-trained professionals, or high budgets. How can one avoid concluding that those responsible for the report assume that, compared with health needs, the needs of those deemed to be illiterate taken care of on the cheap? And how can we avoid concluding that one reason that computers and IT are scarcely mentioned in the report is that they cost too much for the government to consider?

7. *Assumptions about policy, how to bring about change in practice*

Implementation of an integrated policy for literacy programs enhances life choices for individuals, families, and communities. We believe this is the case, but only if such programs

are based on community values and solid, current research; if they include access to and instruction in computer technology; and if they are adequately funded and provided with appropriate resources. But even with all this, we have come to understand that the best programs can be sabotaged. The enemy can come from within or from without or simultaneously from both. One example: access to computers means possible access to pornography. We had problems arise when one participant viewed pornography on the Internet. Issues of betrayal, sexism, racism, and clashing ideologies raised their ugly heads. We have worked out strategies for dealing with the current problem, but have, in a sense, lost some of our innocence and optimism. This loss is sad, but it's also useful, in that we have had to rely on and learn from each other; students, participants, school principal, school board, parents. As co-directors of the project, Bobbi and I were not sure how to handle the pornography situation. We wanted to solve the problem collaboratively, in consultation with participants, tutors, Brighter Futures site managers, and school personnel. And we are now more prepared for the next challenge.

Conclusion (by Roberta Hammett)

As researchers of technological and other literacy learning, we are encouraged by the successes we have observed and have shared in this set of papers. But we also understand the importance of the tensions that arise and the necessity of continuously reflecting on our motivations and the assumptions that underlie our decisions, including our middle-class educated presumptions about poverty, literacy and the nature of democracy. This is a challenge we accept as we continue to work in and with the communities in our city with our "friendly neighbourhood computers".

References

Burman, E. (1992). Feminism and discourse in developmental psychology: Power, subjectivity, and interpretation. Feminism & Psychology, 2(1), 45-59.

Cope, B. & Kalantzis, K. (Eds.). (2000). Multiliteracies: Literacy learning and the design of social futures. London: Routledge.

Daniell, B. (1986). Ong's great leap: The politics of literacy and orality. Unpublished doctoral dissertation. University of Texas, Austin.

Dias, P., Freedman, A., Medway, P. & Paré, A. (1999). Worlds apart: Acting and writing in academic and workplace contexts. Mahwah, NJ: Lawrence Erlbaum.

Dick, B. (1993). How to Conduct and Report Action Research? Retrieved on May. 13th, 2001, from the World Wide Web: http://www.scu.edu.au/schools/sawd/arr/arth/arthesis.html.

Fagan, W. (1998). Literacy for living: A study of literacy and cultural context in rural Canadian communities. St. John's, NF: Institute of Social and Economic Research.

Faigley, L. (1992). Fragments of rationality: Postmodernity and the subject of composition. Pittsburgh: University of Pittsburgh Press.

Freire, P. (1985). The Politics of Education: Culture, Politics and Liberation. Hadley, MA: Bergin & Garvey.

Freire, P. & Macedo, D. (1987). Literacy: Reading the word and the world. South Hadley, MA: Bergin & Garvey.

Giroux, H. (1987). Introduction. In P. Freire & D. Macedo, Literacy: Reading the word and the world (pp. 1-27). South Hadley, MA: Bergin & Garvey.

Government of Newfoundland and Labrador. (1998). People, partners and prosperity: A strategic social plan for Newfoundland and Labrador. St. John's: Author.

Government of Newfoundland and Labrador. (2000). Words to live by: A strategic literacy plan for Newfoundland and Labrador. St. John's: Author.

Graff, G. (1979). The literacy myth: Literacy and social structure in the nineteenth-century city. New York: Academic Press.

Horsman, J. (1990). Something in my mind besides the everyday: Women and literacy. Toronto: Women's Press.

Hull, G. (2001). Hearing other voices: A critical assessment of popular views on literacy and work. In E. Cushman, E. R. Kintgen, B.M. Kroll, & M. Rose (Eds.), Literacy: A critical sourcebook (pp. 660-83). Boston: Bedford.

Johnson, B. (1993). Teacher as researcher. Washington: ERIC Clearinghouse on Teacher Education. (ERIC Document Reproduction Service No. ED355205).

Lather, P. (1991). Getting smart: Feminist research and pedagogy with/in the postmodern. New York: Routledge.

Ristock, J. & Pennell, J. (1996). Community research as empowerment: Feminist links, postmodern interruptions. Toronto: Oxford Press.

Schmuck, R. (1997). Practical action research for change. Arlington Heights, Illinois: IRI/Skylight Training and Publishing, Inc.

Selfe, C. (1999). Technology and literacy in the twenty-first century: The importance of paying attention. Carbondale: Southern Illinois University Press.

Selfe, C. & Wahlstrom, B. (1983). The benevolent beast: Computer-assisted

instruction for the teaching of writing. Writing Instructor, 2: 183-92.

Shannon, P. (1998). Reading poverty. Portsmouth, NH: Heinemann.

Shaughnessy, M. P. (1977). Errors and expectations: A guide for the teacher of basic writing. New York: Oxford University Press.

Sledd, J. (1983). In defense of the students' right. College English, 33, 439-56.

Stuckey, E. (1991). The violence of literacy. Portsmouth: Boynton/Cook Heinemann.